

Results of Higher Education: Learning Outcomes – perspectives on a moving target?**Abstract**

In the contemporary policy context, learning outcomes should be seen as a device for teaching, learning and assessment, but not the least also a tool linked to governance and management, in the sense that the introduction of learning outcomes entails a move to a results orientation. While learning outcomes are often treated as a 'neutral' object in assessment and empirical measurement, they are not an unambiguous or neutral tool; both the principles for assessing outcomes, the actual results at individual, study program and higher education institution level, and the dissemination and interpretations of results are generally intended to have a certain impact. Therefore learning outcomes can be approached as a multifaceted phenomenon, in which variation between fields of science is particularly important. Based on survey data from four different academic and professional fields of study – teaching, nursing, engineering and law, the paper explores disciplinary differences in learning outcomes.

Background

On the international level, higher education learning outcomes are a central part of the Bologna process as well as several EU and OECD processes on the development and introductions of qualification frameworks. This attention must be seen in relation to a higher education context seeking approaches for enhanced accountability, a term which has come to be synonymous with fair and good governance as well as many loosely defined political desiderata, such as transparency, equity, democracy, efficiency and integrity (Bovens 2005: 183). Numerous programmes for increased accountability have been introduced over recent decades in higher education. These approaches are all part of a wider, major shift in the concept of accountability in public organisations, which has re-focused efforts from compliance with rules to production of results (Frølich 2011). Learning outcomes of higher education (HELO) are therefore a key feature in a changing higher education landscape, linked to a range of policy shifts, and are applied through a wide range of measurements and approaches.

Therefore, in the contemporary policy context, HELO should be seen as a device for teaching, learning and assessment, but not the least also a tool linked to governance and management, in the sense that the introduction of HELOs entails a move to a results orientation. Prøitz (2010: 132) points out that learning outcomes have been discussed by many important contributors, but the knowledge base that has emerged from this discussion can be characterised as fragmented and incoherent, consisting of a long line of small, narrow studies, often with weak empirical foundation. The key gaps and limitations to knowledge about learning outcomes are therefore not driven by a lack of studies discussing the phenomenon, which are numerous (see Prøitz 2010). However, one persisting challenge is that the available measures of learning outcomes such as tests, grades and self-reported learning outcomes may yield different answers (Hovdhaugen et al. 2007) which necessitate improvements if higher education learning outcomes are to function as performance indicators in higher education. While learning outcomes are often treated as a 'neutral' object in assessment and empirical measurement, they are not an unambiguous or neutral tool; both the principles for assessing outcomes, the actual results at individual, study program and higher education institution level, and the dissemination and interpretations of results are generally intended to have a certain impact. In this way, information from assessments may serve as a tool for various stakeholders and actors (those internal and external to higher education systems). Therefore, improving performance indicators and understanding about how learning outcomes can be utilised in performance

indicators, is therefore an important undertaking, if such measures are to play an effective role in the higher education system.

One phenomenon – different measures?

Therefore learning outcomes can be approached as a multifaceted phenomenon (Havnes and McDowell 2008), in which variation between fields of science is particularly important (Becher 1989; Muller 2009). The knowledge base of the academic disciplines and professional fields and the norms and values underpinning the socialisation of students are therefore essential aspects of higher education learning outcomes. There are significant differences between hard and soft fields in their degree of paradigm development, specialisation, fragmentation and epistemological beliefs, all of which impact on goals for learning and modes of teaching and instruction (Neumann and Becher 2002; Young 2010). Moreover, while teaching in pure academic disciplines relates to a cognitive core, teaching in applied professional programmes is primarily a matter of qualifying for professional practice (Smeby 2008). Employability play a more important role in curriculum development in professional programmes and is often also directly involved in placement training (Støren and Aamodt 2010).

We apply data from four different academic and professional fields of study – teaching, nursing, engineering and law – to compare and discuss the different measures of learning outcomes. A quantitative analysis is performed of the information in *The Graduate survey*, which consists of many different questions examining the graduates' competence and career development in the first year after graduation. They are also asked to provide information on their average grade point average upon graduation. By combining this information it is possible to examine in how different measurements fit different academic fields; in which areas learning outcomes have been greatest; and also examine the relationship between learning outcomes measured by survey questions, and learning outcomes measured by self-reported grades.

Preliminary results

The data has allowed for multifaceted comparisons of different measures of learning outcomes (grades and self-reported learning outcomes); across as well as within different professional and disciplinary contexts. More over the analysis indicates that learning outcomes are multidimensional even within disciplines and professions as they seemingly cluster around clearly meaningful components (knowledge and reflection as well as social/ethical, practical and managerial outcomes) while these components also seemingly vary to some extent between the disciplines and professions. The analysis indicates as assumed that different measures of learning outcomes may yield different answers, however there are noticeable overlaps between parts of what graduates report and their grades, which point in the direction of assuming that grades as measure of learning outcomes reflect only some aspects of what graduates report they have gained from study.

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